

Claim Amendments

- 1-6. (canceled)
7. (Previously presented) The system of claim 15, the infrastructure module further comprising at least one standardized application programming interface.
8. (currently amended) The system of claim 7, in which the at least one standardized application programming interface ~~further comprising an application programming interface in accordance with~~ is standardized to match a standard defined by the Network Processing Forum.
9. (Previously presented) The system of claim 15, the infrastructure module further comprising a namespace to allow registration of components of the infrastructure module.
10. (Previously presented) The system of claim 15, the infrastructure module further comprising a control plane protocol module registration module and a packet redirection module.
11. (Previously presented) The system of claim 15, the infrastructure module further comprising a binding and discovery module and a transport module to allow the infrastructure module to communicate with other infrastructure modules on other network devices.
12. (Previously presented) The system of claim 15, the communication library further comprising a peer control plane protocol module application programming interface.
13. (Previously presented) The system of claim 15, the communication library further comprises a messaging layer.

14. (Previously presented) The system of claim 15, the communication library further comprising a transport abstraction layer to handle interconnection and transport protocols.

15. (Previously presented) A system, comprising:

- a control plane having a controller control plane protocol module to implement a core functionality of a control plane protocol module;

- at least one forwarding plane having a worker control plane protocol module to implement a portion of the control plane protocol module that is separate and distinct from the core functionality;

- a backplane to provide connectivity between the control plane and the forwarding plane; and

- an infrastructure module resident on the control plane and the forwarding plane constructed and arranged to manage the connectivity between the control plane and the forwarding plane; and

- a communication library resident on the control plane and the forwarding plane to communicate with the infrastructure module to obtain information about control plane protocol modules and to setup connections with the control plane protocol modules.

16-18. (canceled)

19. (previously presented) A method of distributing processing in a network device, comprising:

- defining controller and worker control plane protocol modules, wherein the controller control plane protocol module implements a core functionality of a control plane protocol module on a control plane, and wherein the worker control plane protocol module implements a portion of the control plane protocol module that is separate and distinct from the core functionality on at least one forwarding plane;

- developing corresponding entries in a communications library;

- implementing an infrastructure module, the communication library and the controller module on a control plane the control plane; and

implementing the infrastructure module, the communication library and the worker modules on a forwarding plane the at least one forwarding plane; and

wherein the infrastructure module is constructed and arranged to manage the connectivity between the control plane and the forwarding plane, and wherein the communication library resides on the control plane and the forwarding plane to communicate with the infrastructure module to obtain information about control plane protocol modules and to setup connections with the control plane protocol modules.

20. (original) The method of claim 19, defining a controller and worker control plane protocol modules further comprising providing interfaces between the controller and worker modules.

21. (original) The method of claim 19, developing corresponding entries in a communications library further comprising developing instructions that, when executed, cause the controller and worker control plane protocol modules to communicate.

22. (currently amended) An article of ~~computer-readable media containing machine~~ readable instructions that, when executed, cause the ~~computer~~ machine to:

define controller and worker control plane protocol modules, wherein the controller control plane protocol module implements a core functionality of a control plane protocol module on a control plane, and wherein the worker control plane protocol module implements a portion of the control plane protocol module that is separate and distinct from the core functionality on at least one forwarding plane;

develop corresponding entries in a communications library;

implement an infrastructure module, the communication library and the controller module on a control plane; and

implement the infrastructure module, the communication library and the worker modules on a forwarding plane; and

wherein the infrastructure module is constructed and arranged to manage the connectivity between the control plane and the forwarding plane, and wherein the communication library resides on the control plane and the forwarding plane to communicate with the infrastructure

module to obtain information about control plane protocol modules and to setup connections with the control plane protocol modules.

23. (original) The article of claim 22, the instructions that cause the machine to define a controller and worker control plane protocol modules further cause the machine to provide interfaces between the controller and worker modules.

24. (original) The article of claim 22, the instructions that cause the machine to develop corresponding entries in a communications library further cause the machine to develop instructions that, when executed, cause the controller and worker control plane protocol modules to communicate.